

Status of the Claims:

Claims 1-33. (Canceled)

Claim 34. (Previously presented) A stent constructed from a metal tube, the stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a first serpentine expansion column having a proximal end region and a distal end region, the first serpentine expansion column defining a continuous closed path about the circumference of the stent,

a plurality of interconnected second expansion struts, the second expansion struts forming a second serpentine expansion column having a proximal end region and a distal end region, the second serpentine expansion column defining a continuous closed path about the circumference of the stent,

a plurality of interconnected third expansion struts, the third expansion struts forming a third serpentine expansion column having a proximal end region and a distal end region, the third serpentine expansion column defining a continuous closed path about the circumference of the stent,

01 a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first serpentine expansion column, a second end extending from the proximal end region of the second serpentine expansion column and at least one curved region between the first end and the second end of the first connecting strut, the first end of the first connecting strut longitudinally and circumferentially offset from the second end of the first connecting strut, the first and second serpentine expansion columns connected only by first connecting struts,

a second connecting strut column comprising a plurality of second connecting struts, each second connecting strut having a first end extending from the distal end region of the second serpentine expansion column, a second end extending from the proximal end region of the third serpentine expansion column and at least one curved region between the first end and the second end of the second connecting strut, the first end of the second connecting strut longitudinally and circumferentially offset from the second end of the second connecting strut, the second and third serpentine expansion columns connected only by second connecting struts.

Claim 35. (Previously presented) The stent of claim 34 wherein the first expansion struts and

the first connecting struts are provided in a ratio, the ratio of the first expansion struts to the first connecting struts is 2:1.

Claim 36. (Previously presented) The stent of claim 34 wherein the first expansion column comprises a plurality of joining struts in the distal end region and a plurality of joining struts in the proximal end region, the second expansion column comprises a plurality of joining struts in the distal end region and a plurality of joining struts in the proximal end region, and each first connecting strut has a first end which extends from a side of one joining strut in the distal end region of the first expansion column and a second end which extends from a side of one joining strut in the proximal end region of the second expansion column.

Claim 37. (Previously presented) A stent constructed from a metal tube, the stent comprising:
a plurality of expansion strut columns each of which defines a continuous closed path about the circumference of the stent, each expansion strut column defining a proximal end region and a distal end region, and consisting of a plurality of interconnected expansion struts, each expansion strut connected only at a proximal end to one expansion strut adjacent thereto and only at a distal end to another expansion strut adjacent thereto;

21
and a plurality of connecting strut columns, each connecting strut column extending between two adjacent expansion strut columns, each connecting strut column consisting of a plurality of connecting struts, each connecting strut having a first end extending from the distal end region of one expansion column, a second end extending from the proximal end region of an adjacent expansion column and at least one curved region between the first end and the second end of the connecting strut, the first end of the first connecting strut longitudinally and circumferentially offset from the second end of the connecting strut, only first connecting struts extending from the distal end region of the first expansion column and only first connecting struts extending from the proximal end region of the second expansion column.

Claim 38. (Previously presented) A stent constructed from a metal tube, the stent comprising:
a first expansion strut column defining a proximal end region and a distal end region, the first expansion strut column consisting of a plurality of interconnected first expansion struts and a plurality of joining struts in the distal end region and a plurality of joining struts in the proximal end region, each first expansion strut connected only at a proximal end to one first expansion strut adjacent thereto and only at a distal end to another first expansion strut adjacent thereto, the

first expansion strut column defining a continuous closed path about the circumference of the stent;

a second expansion strut column defining a proximal end region and a distal end region, the second expansion strut column consisting of a plurality of interconnected second expansion struts and a plurality of joining struts in the distal end region and a plurality of joining struts in the proximal end region, each second expansion strut connected only at a proximal end to one second expansion strut adjacent thereto and only at a distal end to another second expansion strut adjacent thereto, the second expansion strut column defining a continuous closed path about the circumference of the stent;

71 a first connecting strut column consisting of a plurality of first connecting struts, each first connecting strut having a first end extending from the a side of one joining strut in the distal end region of the first expansion column, a second end extending from a side of one joining strut in the proximal end region of the second expansion column and at least one curved region between the first end and the second end of the connecting strut, the first end of the first connecting strut longitudinally and circumferentially offset from the second end of the first connecting strut, only first connecting struts extending from the distal end region of the first expansion column and only first connecting struts extending from the proximal end region of the second expansion column.

Claim 39. (Previously presented) A stent constructed from a metal tube, the stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a first serpentine expansion column having a proximal end region and a distal end region,

a plurality of interconnected second expansion struts, the second expansion struts forming a second serpentine expansion column having a proximal end region and a distal end region,

a plurality of interconnected third expansion struts, the third expansion struts forming a third serpentine expansion column having a proximal end region and a distal end region,

the first, second and third serpentine expansion columns each defining a continuous closed path about the circumference of the stent;

a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first expansion column and a second end extending from the proximal end region of the second expansion

column and at least one curved portion,

a second connecting strut column comprising a plurality of second connecting struts, each second connecting strut having a first end extending from the distal end region of the second expansion column and a second end extending from the proximal end region of the third expansion column and at least one curved portion;

the first serpentine expansion column, the second serpentine expansion column and the first connecting strut column forming a plurality of first geometric cells about the circumference of the stent,

each first geometric cell having a proximal region extending between two adjacent first expansion struts, a distal region extending between two adjacent second expansion struts and a middle region extending between two adjacent first connecting struts, the proximal region and the distal region circumferentially offset from one another, the stent having only first geometric cells.

Claim 40. (Previously presented) The stent of claim 39 wherein each first connecting strut includes at least two curved portions.

Claim 41. (Previously presented) The stent of claim 40 wherein the first expansion struts and the first connecting struts are provided in a ratio, the ratio of the first expansion struts to the first connecting struts is 2:1.

Claim 42. (Previously presented) A stent constructed from a metal tube, the stent consisting of a plurality of expansion columns each of which forms a closed pathway about the circumference of the stent, adjacent expansion columns connected to one another via connecting members, the stent expansion columns and connecting members forming a plurality of cells, each of the plurality of cells having substantially the same asymmetrical shape, each of the plurality of cells having a first end portion and a second end portion, the second end portion longitudinally and circumferentially offset from the first end portion, the first end portion connected to the second end portion via a plurality of connecting members each of which has a plurality of curved sections.

Claim 43. (Previously presented) The stent of claim 42 where each connecting member has a first end and a second end which is circumferentially and longitudinally offset from the first end.

Claim 44. (Previously presented) An unexpanded stent constructed from a metal tube, the stent comprising:

a plurality of expansion struts arranged in expansion columns, the expansion struts within an expansion column being interconnected, each expansion column defining a continuous closed path about the circumference of the stent;

the expansion struts including a plurality of interconnected first expansion struts, a plurality of interconnected second expansion struts, and a plurality of interconnected third expansion struts

the first expansion struts forming a first expansion column having a proximal end region and a distal end region, each first expansion strut connected at a proximal end to only one expansion strut, namely a first expansion strut by a first proximal joining strut and at a distal end to only one expansion strut, namely a first expansion strut by a first distal joining strut, the first expansion column having a plurality of first proximal corners where each first proximal joining strut and each first expansion strut are connected and a plurality of first distal corners where each first distal joining strut and each first expansion strut are connected;

the second expansion struts forming a second expansion column having a proximal end region and a distal end region, each second expansion strut connected at a proximal end to only one expansion strut, namely a second expansion strut by a second proximal joining strut and at a distal end to only one expansion strut, namely a second expansion strut by a second distal joining strut, the second expansion column having a plurality of second proximal corners where each second proximal joining strut and each second expansion strut are connected and a plurality of second distal corners where each second distal joining strut and each second expansion strut are connected;

the third expansion struts forming a third expansion column having a proximal end region and a distal end region, each third expansion strut connected at a proximal end to only one expansion strut, namely a third expansion strut by a third proximal joining strut and at a distal end to only one expansion strut, namely a third expansion strut by a third distal joining strut, the third expansion column having a plurality of third proximal corners where each third proximal joining strut and each third expansion strut are connected and a plurality of third distal corners where each third distal joining strut and each third expansion strut are connected;

a first connecting strut column consisting of a plurality of first connecting struts, each first connecting strut having a single first end extending from one of the plurality of first distal

corners of the distal end region of the first expansion column, a single second end extending from one of the plurality of second proximal corners of the proximal end region of the second expansion column and at least one curved region between the first end and the second end of the connecting strut, the first end of the first connecting strut connecting to the first expansion column at a location which is longitudinally and circumferentially offset from a location at which the second end of the connecting strut connects to the second expansion column and

a second connecting strut column consisting of a plurality of second connecting struts, each second connecting strut having a single first end extending from one of the plurality of second distal corners of the distal end region of the second expansion column, a single second end extending from one of the plurality of third proximal corners of the proximal end region of the third expansion column and at least one curved region between the first end and the second end of the connecting strut, the first end of the second connecting strut connecting to the second expansion column at a location which is longitudinally and circumferentially offset from a location at which the second end of the connecting strut connects to the third expansion column.

Claim 45. (Previously presented) The stent of claim 44 wherein the first expansion column comprises a plurality of loops in the distal end region and a plurality of loops in the proximal end region, the second expansion column comprises a plurality of loops in the distal end region and a plurality of loops in the proximal end region, and each first connecting strut has a first end which extends from a side of one loop in the distal end region of the first expansion column and a second end which extends from a side of one loop in the proximal end region of the second expansion column.

Claim 46. (Currently amended) A cellular stent constructed from a metal tube, all of the cells of the stent being of uniform geometry, the stent consisting of a plurality of interconnected expansion struts and connecting struts including:

a plurality of interconnected first expansion struts, the first expansion struts forming a first expansion column having a proximal end region and a distal end region, each first expansion strut connected at a proximal end to one first expansion strut adjacent thereto by a first proximal joining strut and at a distal end to another first expansion strut adjacent thereto by a first distal joining strut, the first expansion column having a plurality of first proximal intersections where each first proximal joining strut and each first expansion strut are connected and a plurality of

first distal intersections where each first distal joining strut and each first expansion strut are connected;

a plurality of interconnected second expansion struts, the second expansion struts forming a second expansion column having a proximal end region and a distal end region, each second expansion strut connected at a proximal end to one second expansion strut adjacent thereto by a second proximal joining strut and at a distal end to another second expansion strut adjacent thereto by a second distal joining strut, the second expansion column having a plurality of second proximal intersections where each second proximal joining strut and each second expansion strut are connected and a plurality of second distal intersections where each second distal joining strut and each second expansion strut are connected;

the first and second expansion ~~columns~~ columns each defining a continuous closed path about the circumference of the stent;

a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from a location immediately adjacent to one of the plurality of first distal intersections of the distal end region of the first expansion column, a second end extending from a location immediately adjacent to one of the plurality of second proximal intersections of the proximal end region of the second expansion column and at least one curved region between the first end and the second end of the connecting strut, the first end of the first connecting strut longitudinally and circumferentially offset from the second end of the first connecting strut.

Claim 47. (Currently amended) An unexpanded stent constructed from a metal tube, the stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a first expansion column having a proximal end region and a distal end region, each first expansion strut connected at a proximal end to one first expansion strut adjacent thereto and at a distal end to another first expansion strut adjacent thereto;

a plurality of interconnected second expansion struts, the second expansion struts forming a second expansion column having a proximal end region and a distal end region, each second expansion strut connected at a proximal end to one second expansion strut adjacent thereto and at a distal end to another second expansion strut adjacent thereto;

the first and second expansion ~~columns~~ columns each defining a continuous closed path about the circumference of the stent;

a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first expansion column at a location in closer proximity to one first expansion strut than to any other of the plurality of first expansion struts, a second end extending from the proximal end region of the second expansion column at a location in closer proximity to one second expansion strut than to any other of the plurality of second expansion struts and at least one curved region between the first end and the second end of the connecting strut, the first end of the first connecting strut longitudinally and circumferentially offset from the second end of the first connecting strut.

48. (Previously presented) An unexpanded stent constructed from a metal tube, the stent having a first end, a second end and longitudinal axis, the stent comprising:

a plurality of interconnected first expansion struts, the interconnected first expansion struts forming a closed, continuous first expansion column having a proximal end region and a distal end region, each first expansion strut connected at a proximal end to one first expansion strut adjacent thereto and at a distal end to another first expansion strut adjacent thereto;

a plurality of interconnected second expansion struts, the second expansion struts forming a closed, continuous second expansion column having a proximal end region and a distal end region, each second expansion strut connected at a proximal end to one second expansion strut adjacent thereto and at a distal end to another second expansion strut adjacent thereto;

a first connecting strut column comprising a plurality of first connecting struts,
each first connecting strut having a first end extending from a first location at the distal end region of the first expansion column,

a second end extending from a second location at the proximal end region of the second expansion column, the second location circumferentially and longitudinally offset from the first location,

and at least one curved region between the first end and the second end of the connecting strut,

wherein the first end of the stent consists of the first expansion column.

Claim 49. (Previously presented) An unexpanded stent constructed from a metal tube, the

stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a closed, continuous first expansion column having a proximal end region and a distal end region, each first expansion strut connected at a proximal end to one first expansion strut adjacent thereto and at a distal end to another first expansion strut adjacent thereto;

a plurality of interconnected second expansion struts, the second expansion struts forming a closed, continuous second expansion column having a proximal end region and a distal end region, each second expansion strut connected at a proximal end to one second expansion strut adjacent thereto and at a distal end to another second expansion strut adjacent thereto;

a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first expansion column at a location in closer proximity to one first expansion strut than to any other of the plurality of first expansion struts,

each first connecting strut including a first end which is connected to the first expansion strut column and which extends in a longitudinal direction toward the second expansion column and in a circumferential direction away from the two first expansion struts which are distally interconnected and nearest to the first end, the connecting strut including a portion which extends in a longitudinal direction toward the second expansion column and in a circumferential direction toward the two first expansion struts nearest to the first end of the connecting strut.

Claim 50. (Previously presented) An unexpanded stent constructed from a metal tube, the stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a closed, continuous first expansion column having a proximal end region and a distal end region, each first expansion strut connected at a proximal end to one first expansion strut adjacent thereto and at a distal end to another first expansion strut adjacent thereto;

a plurality of interconnected second expansion struts, the second expansion struts forming a closed, continuous second expansion column having a proximal end region and a distal end region, each second expansion strut connected at a proximal end to one second expansion strut adjacent thereto and at a distal end to another second expansion strut adjacent thereto;

a plurality of interconnected third expansion struts, the third expansion struts

forming a closed, continuous third expansion column having a proximal end region and a distal end region, each third expansion strut connected at a proximal end to one third expansion strut adjacent thereto and at a distal end to another third expansion strut adjacent thereto;

a first connecting strut column consisting of a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first expansion column at a location in closer proximity to one first expansion strut than to any other of the plurality of first expansion struts,

and a second end which is connected to the second expansion strut column at a second location, the first and second locations longitudinally and circumferentially offset from one another;

a second connecting strut column consisting of a plurality of second connecting struts, each second connecting strut having a first end extending from the distal end region of the second expansion column at a location in closer proximity to one second expansion strut than to any other of the plurality of second expansion struts, and a second end which is connected to the third expansion strut column a location which is longitudinally and circumferentially offset from the location of the first end of the connecting strut,

wherein the first and second expansion strut columns are connected to one another only via the first connecting strut column and the second and third expansion strut columns are connected to one another only via the second connecting strut column.

